

ETHNOMEDICINE AND PLANT FOOD IN KALABARI; THEIR PHARMACOGNOSY AND NUTRITIONAL IMPLICATIONS.

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ABSTRACT

The socio-cultural impact of certain food and medicinal plants among the people of Kalabari (Rivers State) was investigated. Twenty one plant taxa were implicated in this study. The finding revealed that plant nomenclature in Kalabari was based on their communal use and relationships among the plants popularly utilized within the community. The myth behind special plants and foods in Kalabari were also elucidated using current literature.

KEYWORDS: Ethnomedicine, plant food, Kalabari, Pharmaceutical, Nutrition, Medicinal plants

INTRODUCTION

In every culture, there are plants utilized for food and medicine which the orthodox taxonomist and physicians have not replaced (Olorode 1984). The earliest taxonomists were also naturalists who were physicians in their own right. Plants as autotrophs are useful in every sphere of life (Egunyemi 2002). Green, (1995) and Stace (19080) reported that the family Apocynaceae was useful as food (Genus Landolphia) and as medicine (genus landolphia) and as medicine (genus Rauvolfia) Ogbonda (2002) reported numerous uses of plants including plants as single cell protein. Kalabari people also have those plants that are useful peculiar to them. There are also the exotic plants brought in as they interacted and transacted businesses with new neighbour. Kadans (1970) report that plant food and medicine are the most true and ancient food and medicine. In 1976, World Health organization recognized plant medicine as plants which when used will and generate health in the life of those that use them.

Simpson and Ogorzaly (1995) proposed that plants used as medicine and food today were discovered by a perilous process of trial and error and That medicinal knowledge accumulated slowly as it was painstakingly passed on by word of mouth from generation to generation (Mann 1992). The history of medicinal plants started before written history. As early as 2500 BC; Sumerians had already put up drawings of opium poppy on their cave walls, suggesting a good knowledge of medicinal plants. However, a substantial record of medicinal plants came from the code of Hammurabi, caved under the directive of king of Babylon in 1770 BC (Black well, 1990) as Wrangham and Goodall (1989) reported, some medicinal plants were used by men who saw other primates using them. The doctrine of signature where plant structures are related to their function also aided the growth of medicinal plants (Ody 1993). Use of plants as food started with the early men. Zimmer (1991) reported the early use of plant as food and suggested that the establishment of man on earth must had been because he could eat the plants in his environment. Sketches of reports have been seen on useful plants of some Nigerian major tribe. The author seeks to present the folk taxonomy and useful plants of the less known Nigeria tribes; Kalabari being one of them.

MATERIALS AND METHODS

Plant taxa in this study were personal collection of the author from the various towns and villages that make up the Kalabari clan, Rivers State – Nigeria (Table 1) Eminent persons in culture and dialect of Kalabari were interviewed and the plants use generally accepted by all the people interviewed were reported as authentic.

TABLE 1: PLANT TAXA, FOLK NAMES AND STATUS

| BOTANICAL NAMES AND COMMON NAMES | FAMILIES | FOLK NAMES | STATUS |
|---|----------------------------|----------------------|------------------------|
| Avicennia-Africana managrove swamp taxon | Avicenniaceae | Okopulo | Medicine |
| Newbouldia Laevis Ageratum conyzoides goat weed | Bignoniaceae Asteraceae | Odumdum Orowidiri | Medicine Sacred |
| Rhyophyllum pinnatum Life plant | Grassuloceae | Ombusuwadiri | Medicine |
| Solenostemon menostachyus Coctus afer inspid cane | Lamiaceae Costoaceae | Mgbediri Okpete | First aid Medicine |
| Acanthus montanus | Acanthaceae | Oguma | Eardrop |
| Citrus aurantium insipid orange | Rutaceae | Aguru elenda | Medicine |
| C.-autantifolia -lime | Rutaceae | Olomiri | Medicine |
| Vernonia amygdalina bitter leaf | Asteraceae | Pilama | Vegetable, Medicine |
| Xylopia aethiopicum | Annonaceae | Enyi | Spice |
| Piper guinensis- black Pepper | Piperaceae | Ojija | Spice |
| Gongronema latifolium | Asclepidiaceae | Otaji | Spice |
| Ocimum gratissima- scent leaf | Lamiaceae | Ekiani | Spice |
| Monodora myristica- Afr. Nutmeg | Annonaceae | Kukrakam | Spice |
| Acrosticum aruem salt water fern aerum | Adiantaceae | Imingiye | Sacred Plant |
| Musa paradisiaca- Plantain | Musaceae | Mbana | Food |
| Colocasia esculentum cocoyam | Areceae | Iku | Food |
| Dioscorea rotundata yam | Dioscoreaceae | Buru | Food |
| Elaeis guinensis palm tree | Arecaceae | Eneme | Oil |
| Baphia nitida chewing stick | Papilionaceae | Duko | Chewing stick |
| Fluerya ovalifolic-akubara African stinging nestle | Urticaceae | Akubara | Medicine |

RESULT AND DISCUSSION

Spices and Ethnomedicines In Kalabari; Their Pharmacognosy And Nutritional Significance.

From pre-historic times, plants have contributed much in the ailment that troubled men. This is also the case with the Kalabari people. To treat any skin disease, the leaves of *Avicinia* sp is burnt and the ashes mixed with palm oil and warmed (oko-pulo) This is very popular in treating any skin disease in Kalabari likewise the extract of *Bryophyllum* (neonatic umbilical wounds), *Acanthus* sp (as first aid for fresh wounds), *Costus* sp (for measles) and *Ageratum* sp (for infection of reproductive tract especially female). It is of significance that without alkaloid analysis, the early Kalabari people chose those medicinal plants probably by trial error. Today many of these plants have proven medicinal values.

For instance, Gill (1992) reported flavonoids (*conyzongin*, *methoxybilentin*) saponins, tannin and quiterpenoids which are effective against ulcers, inflammations, redness of the eyes and leprosy. In *Ageratum conizoides*. He also reported alkaloid trepanoid, eugenol and thymol in *Ocimum gratissima* (scent leaf) which is effective against cold and catearrh. *Piper* sp were also known to contain alkaloids pipline quinine and visine which are diuretic and effective against vomiting and tonsillitis (Delmarco 1994). Kalabari folks are known for their skill in culinary or cuisine culture. To prepare these items. Spices and vegetables are involved. Apart from peppers which they use a lot (due to freshfish dishes) there are other spices like *Ocimum gratissima* *Monodora myristica* *Xylopiea ethiopicum*, *Piper guinensis* and *Vernonia amigdalina* (which is the most relished vegetable. Table 1) these add vitamins, mineral, and essential medicinal alkaloids to their meals (George and Rogers 1999, Mills 1991, Rubatzxy, 1997).

The Rationale of Oral and Home Hygiene: among the people of Kalabari, species of *Baphia* were used as chewing sticks. The presence of tooth paste/brush had not reduced their cultural significance. It is also used for love expression and therefore usually given as a token especially to beloved ones. Pinnate leaflets of palm tree are peeled tied and used for sweeping. The use of *Baphia* species as chewing stick must have come by trial and error but had great medicinal implication. Gill (1992) implicated curative saponins, tannin, iso-santalene and homo-pierocarpine in the stem and leaf of *Baphia nitida*. He also said that these made the plant efficacious in the eye, pains and spasm.

Totem / Sacred Plants. Juvenile fronds of *Elaeis guinensis* were found tied around coffins during burials as well as on lands in dispute. It is also found in family memorial halls known as lkpu. To mark boundries, *Newbouldia leavis* is usually planted. It is believed that *N. leavis* wards off malevolent spirits. The leaves of *Acrosticum* species is used as exterior decor for shrines. *Ageratum conyzoides* is also significant as a cleansing plant and disinfectant t is an important plant as for as traditional mortuary practice is concerned. It was believed to have some mystic powers which warded off spirits for the mortuary attendance, corpse bearers or those women dressing the corpse. This myth was actually in the antibacterial effects of *Agercitum* sp (Gill, 1992, Green,2003)

Typical Kalabari Meals: Many foods have been adapted from neighbours but none had replaced the most important traditional menu of kalabari. These were varieties of plantain meals.

- i ONUNU: Pastry made from ripe boiled plantain and boiled white yam (*Dioscorea rotundata*) while mortaring the two, good quantity of red oil is added. The relish was not complete until it was complimented with local fresh fish pepper soup.
- ii. UNRIPE PLANTAIN MEALS: Kalabari loved plantain especially in the unripe state. Consequent upon this, *Musa paradisiaca* was divided into three on the basis of how it was prepared. *Soot mbana* (boiled and eaten with red oil and freshfish pepper soup), *foite mbana* (roasted and eaten with fish). Frying plantain is not cultural in Kalabari. Without being formally educated, the early Kalabari (since the settlement in their present location in the 18th century had made plantain especially the unripe one their most valued traditional meals. This wisdom has presently been explained by Gill (1992) who reported that unripe plantain contains high level of iron, protein, alkaloids, (*inulin*, *noradrenaline* and *hydroxytryptamine*) all of which are effective in the treatment of ulcer, diarrhea, hysteria and dysentery.

SUMMARY AND CONCLUSION: As a natural community, the Kalabari had unifying dialect and names for their indigenous plants.

Plant nomenclature was based on their relationship and ethnobotany especially as food and medicine. Many ethnomedicinal plants and sacred plants in Kalabari were reputable pharmaceutically with documented alkaloids and glycosides.

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